



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-0696; Product Identifier 2018-SW-019-AD; Amendment 39-21485; AD 2021-07-08]

RIN 2120-AA64

### **Airworthiness Directives; Airbus Helicopters Deutschland GmbH (Type Certificate Previously Held by Eurocopter Deutschland GmbH and Eurocopter Canada Ltd.) Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 97-26-02 for Eurocopter Deutschland GmbH Model BO-105A, BO-105C, BO-105S, BO-105LS A-1, and BO-105LS A-3 helicopters; and Eurocopter Canada Ltd. Model BO-105LS A-3 helicopters. AD 97-26-02 required a repetitive visual inspection for cracks in the ribbed area of the main rotor (M/R) mast flange (flange), and depending on the outcome, replacing the M/R mast. This new AD retains the requirements of AD 97-26-02 and removes the reinforced M/R mast from the applicability. This AD was prompted by the determination that a certain reinforced M/R mast is not affected by the unsafe condition. The actions of this AD are intended to address an unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 31, 1997 (62 FR 65749, December 16, 1997).

**ADDRESSES:** For service information identified in this final rule, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0696.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> in Docket No. FAA-2020-0696; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, the Transport Canada AD, any service information that is incorporated by reference, any comments received, and other information. The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Matt Fuller, AD Program Manager, Operational Safety Branch, Airworthiness Products Section, General Aviation & Rotorcraft Unit, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email [matthew.fuller@faa.gov](mailto:matthew.fuller@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to remove AD 97-26-02, Amendment 39-10245 (62 FR 65749, December 16,

1997) (AD 97-26-02), and add a new AD. AD 97-26-02 applied to Eurocopter Deutschland GmbH Model BO-105A, BO-105C, BO-105LS A-1, and BO-105LS A-3 helicopters and Eurocopter Canada Ltd. Model BO-105LS A-3 helicopters. AD 97-26-02 was prompted by Luftfahrt-Bundesamt (LBA) AD 97-275, effective September 25, 1997, issued by LBA, which is the airworthiness authority for Germany, to correct an unsafe condition for Eurocopter Deutschland GmbH Model BO 105 helicopters; and Transport Canada AD CF-97-18, dated September 30, 1997 (Transport Canada AD CF-97-18), issued by Transport Canada, which is the aviation authority for Canada. The LBA and Transport Canada ADs required an immediate and repetitive visual inspection for a crack in the flange area after an M/R mast was found to have cracks of critical magnitude.

The NPRM published in the *Federal Register* on July 17, 2020 (85 FR 43506). The NPRM proposed to continue to require the repetitive visual inspection for a crack in the ribbed area of the M/R mast flange, and if there is a crack, removing from service the M/R mast and replacing it with an airworthy M/R mast.

The NPRM was prompted by EASA AD 2018-0056, dated March 14, 2018, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters Deutschland GmbH (previously Eurocopter Deutschland GmbH, Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH, Eurocopter Canada Ltd, Messerschmitt-Bölkow-Blohm Helicopter Canada Ltd.) Model BO105 A, BO105 C, BO105 D, BO105 LS A-1, BO105 LS A-3 and BO105 S helicopters. EASA advises of the transfer of type certificate responsibility of Eurocopter Canada Ltd. Model BO-105LS A-3 helicopters to Eurocopter Deutschland GmbH and the determination that reinforced M/R mast part number (P/N) 4639 305 095 of M/R mast assembly P/N 4639 205 017 is not affected by this unsafe condition. The EASA AD retains the repetitive visual inspection requirements but only for helicopters with M/R mast P/N 4619 305 032 of M/R mast assembly P/N

4638 205 005, and M/R mast P/N 4639 305 002 of M/R mast assembly P/N 4639 205 017. With the transfer of type certificate responsibility of Eurocopter Canada Ltd. Model BO-105LS A-3 helicopters, Transport Canada issued Transport Canada AD CF-1997-18R1, dated March 12, 2018, to cancel Transport Canada AD CF-97-18.

Also, since the FAA issued AD 97-26-02, Eurocopter Deutschland GmbH changed its name to Airbus Helicopters Deutschland GmbH. This AD reflects that change and updates the contact information to obtain service documentation.

### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule, but the FAA did not receive any comments on the NPRM or on the determination of the cost to the public.

### **FAA's Determination**

These helicopters has been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is issuing this AD after evaluating all of the information provided by EASA and determining the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

### **Differences Between this AD and the EASA AD**

The EASA AD specifies contacting Airbus Helicopters if there is a crack in the flange, whereas this AD requires replacing the M/R mast instead. Also, the EASA AD applies to Model BO105 D and BO105 S helicopters; this AD does not as these model helicopters are not type-certificated in the U.S.

### **Related Service Information Under 1 CFR part 51**

Eurocopter Deutschland GmbH has issued Alert Service Bulletin No. ASB-BO 105-10-110, dated August 27, 1997, which specifies procedures for repetitive visual inspections of the flange for cracks.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

The FAA estimates that this AD affects 21 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

Inspecting the flange takes about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$441 for the U.S. fleet per inspection cycle.

Replacing the M/R mast takes about 8 work-hours and parts cost about \$30,000 for an estimated cost of \$30,680 per helicopter.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

The FAA has determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 97-26-02, Amendment 39-10245 (62 FR 65749, December 16, 1997); and

- b. Adding the following new AD:

**2021-07-08 Airbus Helicopters Deutschland GmbH (Type Certificate Previously Held by Eurocopter Deutschland GmbH and Eurocopter Canada Ltd.): Amendment 39-21485; Docket No. FAA-2020-0696; Product Identifier 2018-SW-019-AD.**

**(a) Applicability**

This airworthiness directive (AD) applies to Airbus Helicopters Deutschland GmbH Model BO-105A, BO-105C, BO-105S, BO-105LS A-1, and BO-105LS A-3 helicopters, certificated in any category, with a main rotor (M/R) mast part number (P/N) 4619 305 032 of M/R mast assembly P/N 4638 205 005, or M/R mast P/N 4639 305 002 of M/R mast assembly P/N 4639 205 017.

Note 1 to Paragraph (a): M/R mast assembly P/N 4639 205 017 may also contain reinforced M/R mast P/N 4639 305 095, which is not affected by this AD.

**(b) Unsafe Condition**

This AD defines the unsafe condition as cracks in the M/R mast flange (flange). This condition could result in failure of the flange and subsequent loss of control of the helicopter.

**(c) Affected ADs**

This AD replaces AD 97-26-02, Amendment 39-10245 (62 FR 65749, December 16, 1997).

**(d) Effective Date**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(e) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(f) Required Actions**

(1) Before further flight and thereafter at intervals not to exceed 100 hours time-in-service, visually inspect the flange in the ribbed area for cracks using a 5-power or higher magnifying glass in accordance with paragraphs 2.A.1. and 2.A.2. of the

Accomplishment Instructions in Eurocopter Deutschland GmbH Alert Service Bulletin No. ASB-BO 105-10-110, dated August 27, 1997.

(2) If there is a crack, remove from service the cracked M/R mast and replace it with an airworthy M/R mast.

**(g) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (h)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(h) Related Information**

(1) For more information about this AD, contact Matt Fuller, AD Program Manager, Operational Safety Branch, Airworthiness Products Section, General Aviation & Rotorcraft Unit, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email matthew.fuller@faa.gov.



(2) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2018-0056, dated March 14, 2018; and Transport Canada AD CF-1997-18R1, dated March 12, 2018. You may view the EASA and Transport Canada ADs on the Internet at <https://www.regulations.gov> in Docket No. FAA-2020-0696.

**(i) Subject**

Joint Aircraft Service Component (JASC) Code: 6230, Main Rotor  
Mast/Swashplate

**(j) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on December 31, 1997 (62 FR 65749, December 16, 1997).

(i) Eurocopter Deutschland GmbH Alert Service Bulletin No. ASB-BO 105-10-110, dated August 27, 1997.

(ii) [Reserved]

(4) For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(5) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 20, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.  
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